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# PATENT ABSTRACTS OF JAPAN

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## (54) WELDING METHOD

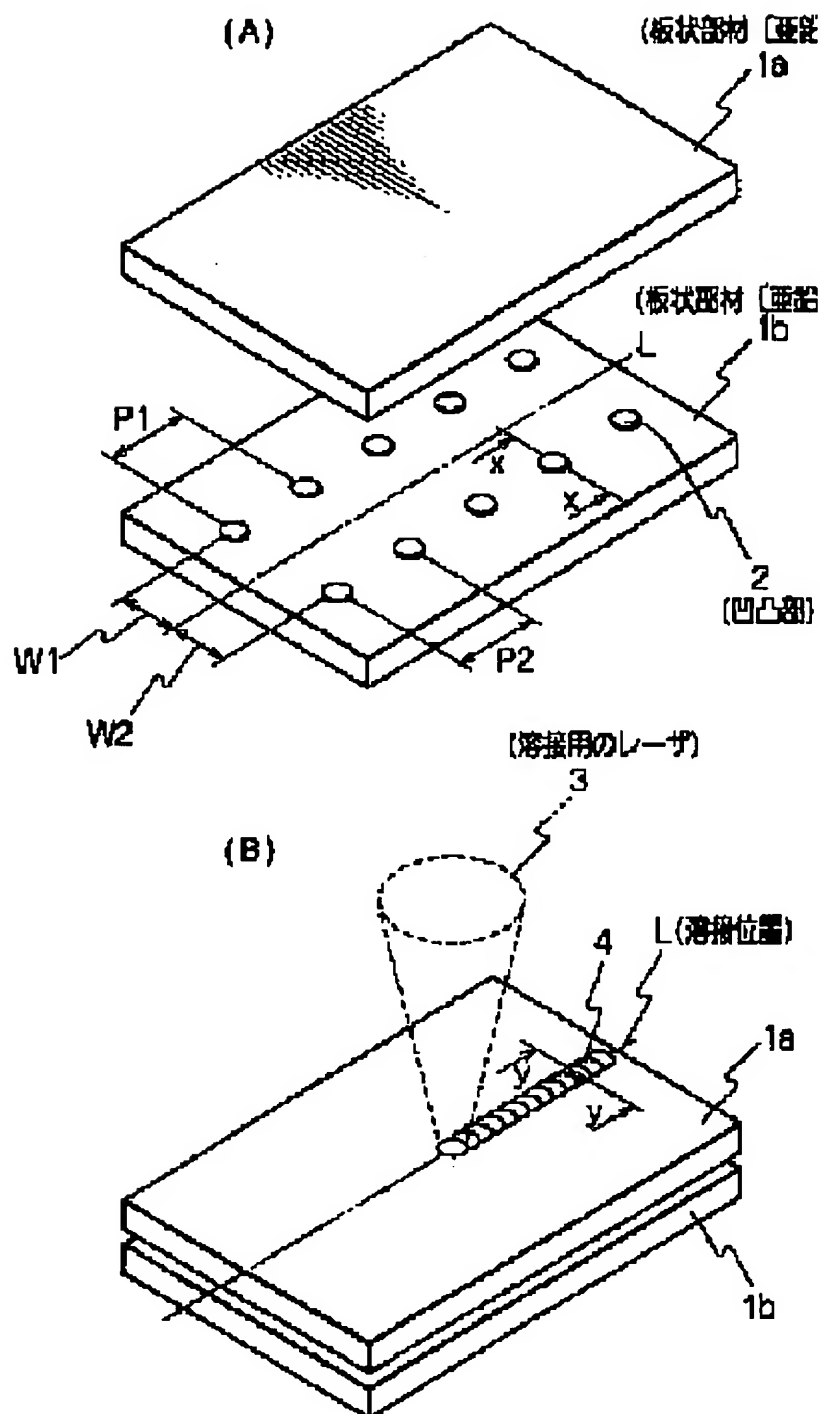
(57) Abstract:

**PROBLEM TO BE SOLVED:** To shorten the working man-hour, and to suppress the equipment cost by irradiating the prescribed laser beam on the surface of a plate-like member to be welded in advance to form ruggedness, laminating the plate-like members so as to hold the surfaces to be welded on which ruggedness is formed, and irradiating the laser beam for welding on the prescribed part of each laminated plate-like member.

**SOLUTION:** The plurality of rows of rugged parts 2 with the interval P1 is formed at the advance W1 from a welding position L on each side of the welding position L in a galvanized steel plate 1b. The plurality of rows of rugged parts 2 with the interval P2 is formed at the distance W2 from the welding position L. The galvanized steel plate 1a is a regular galvanized steel plate free from any rugged part on its

surface. When the galvanized steel plate is irradiated with the pulse-like laser beam, the molten metal is moved toward the outer circumferential part of molten part, the outer circumferential part is slightly raised, and solidified to form the rugged part 2. The galvanized steel plates 1a, 1b laminated on each other are irradiated with the laser beam 3 along the welding position L to achieve the lap welding of the galvanized steel plates 1a, 1b.

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⌘ Title: **JP11047967A2: WELDING METHOD**

⌘ Derwent Title: Zinc galvanised steel sheets welding process - involves superimposing and welding two zinc galvanised steel sheets with laser after forming concave sticking out portions on welding surface of one by laser  
[\[Derwent Record\]](#)

⌘ Country: **JP Japan**

⌘ Kind: **A**

⌘ Inventor: **NAKAMURA TSUYOSHI;  
WASHIO KUNHIKO;**

⌘ Assignee: **NEC CORP**  
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⌘ IPC Code: **B23K 26/00; H01S 3/00;**

⌘ Priority Number: **1997-07-31 JP19971997206423**

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⌘ Family: **None**

⌘ Other Abstract Info: **DERABS C1999-209192 DERABS C1999-209192**



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